Fig. 1

Require: Set of Features satisfied by Set of Attributes

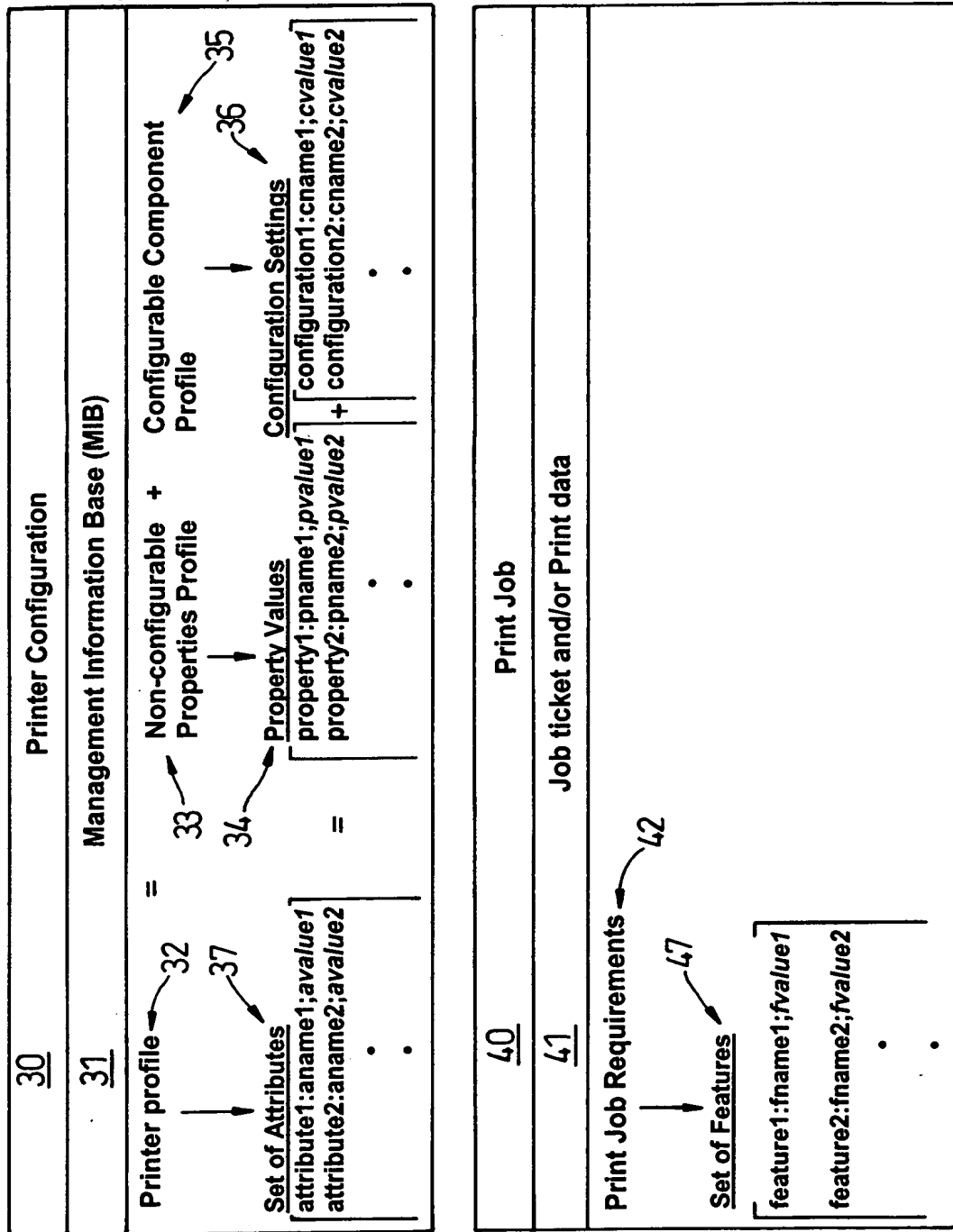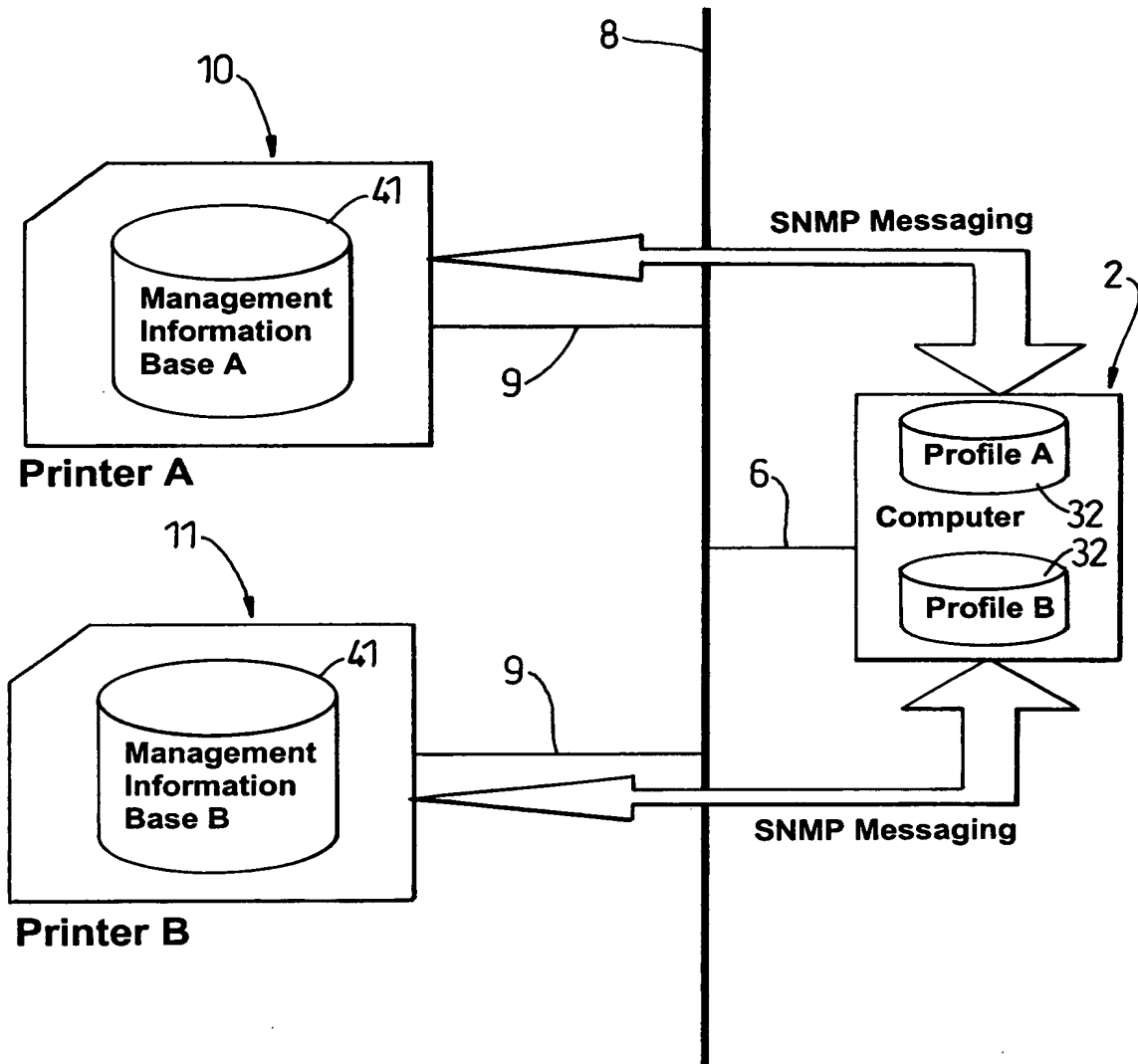**30**   **Printer Configuration**

31   Management Information Base (MIB)

Printer profile = Non-configurable + Configurable Component
(32) (37)   Properties Profile (33)   Profile (35)(36)

Set of Attributes   Property Values (34)   Configuration Settings

attribute1:aname1;avalue1   =   property1:pname1;pvalue1   +   configuration1:cname1;cvalue1
attribute2:aname2;avalue2   property2:pname2;pvalue2   configuration2:cname2;cvalue2
. .   . .   . .

40   **Print Job**

41   Job ticket and/or Print data

Print Job Requirements (42)

Set of Features (47)

feature1:fname1;fvalue1
feature2:fname2;fvalue2
. .

Fig. 2

Typical ASCII job Ticket

%XRXbegin: **1.31**
%XRXdisposition: **PRINT**
%XRXsenderName:
%XRXtitle: **PostScript File**
%XRXcopyCount: **1**
%XRXpaperType-size: **216   279**
%XRXdocumentPaperColors: white
%XRXpaper/Type-opacity: opaque
%XRXpaperType-preFinish: Plain 0 0
%XRXrecipientName:
%XRXrequirements: simplex
%XRXsignature: **FALSE**
%XRXsourceFile: **. . .**
%XRXdeleteSource: FALSE
%XRXxImageShift: **5**
%XRXyImageShift: **0**
%XRXend

Fig. 3
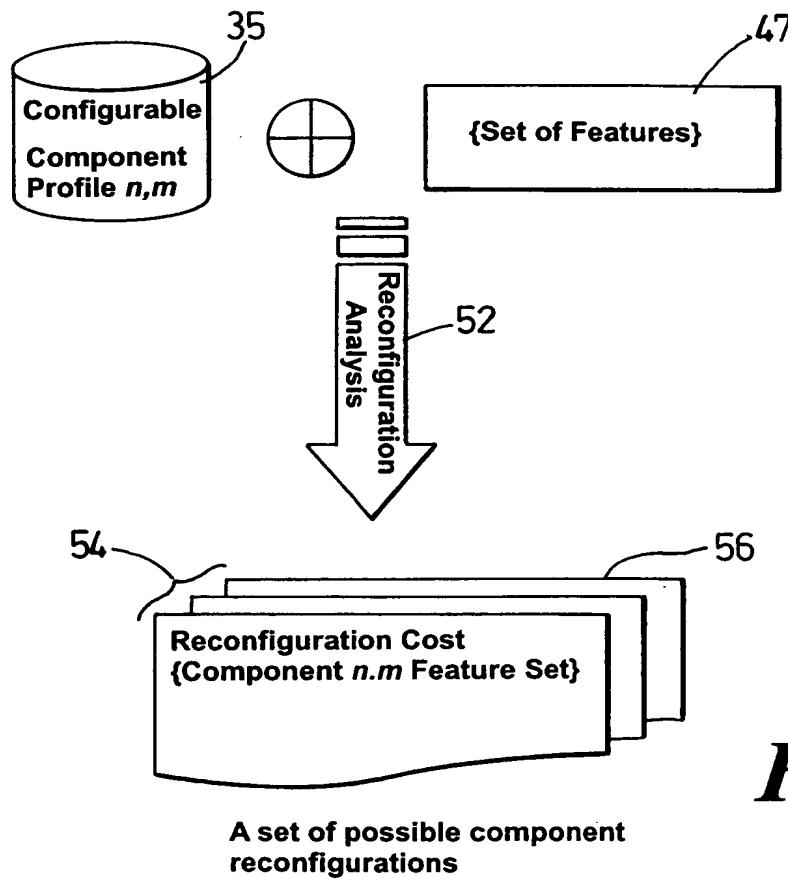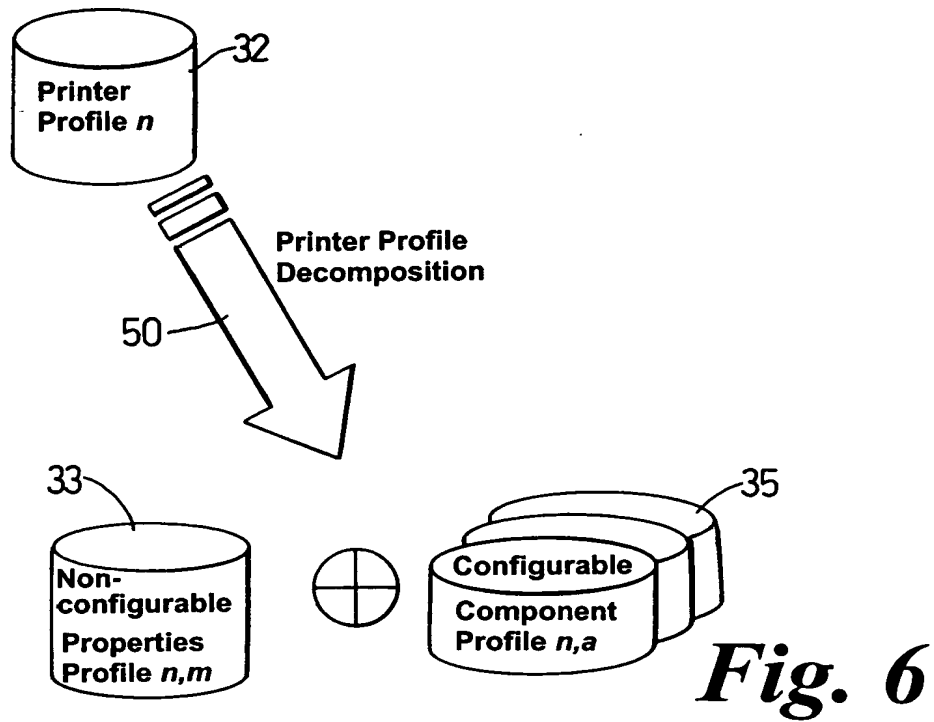
```
job: {
      name       medium-1
      label      "Job  Medium 1 : ABC Inc." ,
      stream     "stream1"
}

stream: {
      type       sequence ,
      name       "stream1"
      streams  ( stream2   stream3 ) }

stream: {
      type       PDL-PCL
      name       "stream2"
      data       "cover.prn" ,
      requires ( { resource   Paper ,
                   attribute  stockname ,
                   value      "coloured  paper" }
            ) }


stream: {
      type       PDL-PCL
      name       "stream3"
      data       "med_job1.prn" ,
      requires ( { resource   Paper ,
                   attribute  stockname,
                   value      "ABC paper  type1"}
                 ) }
```
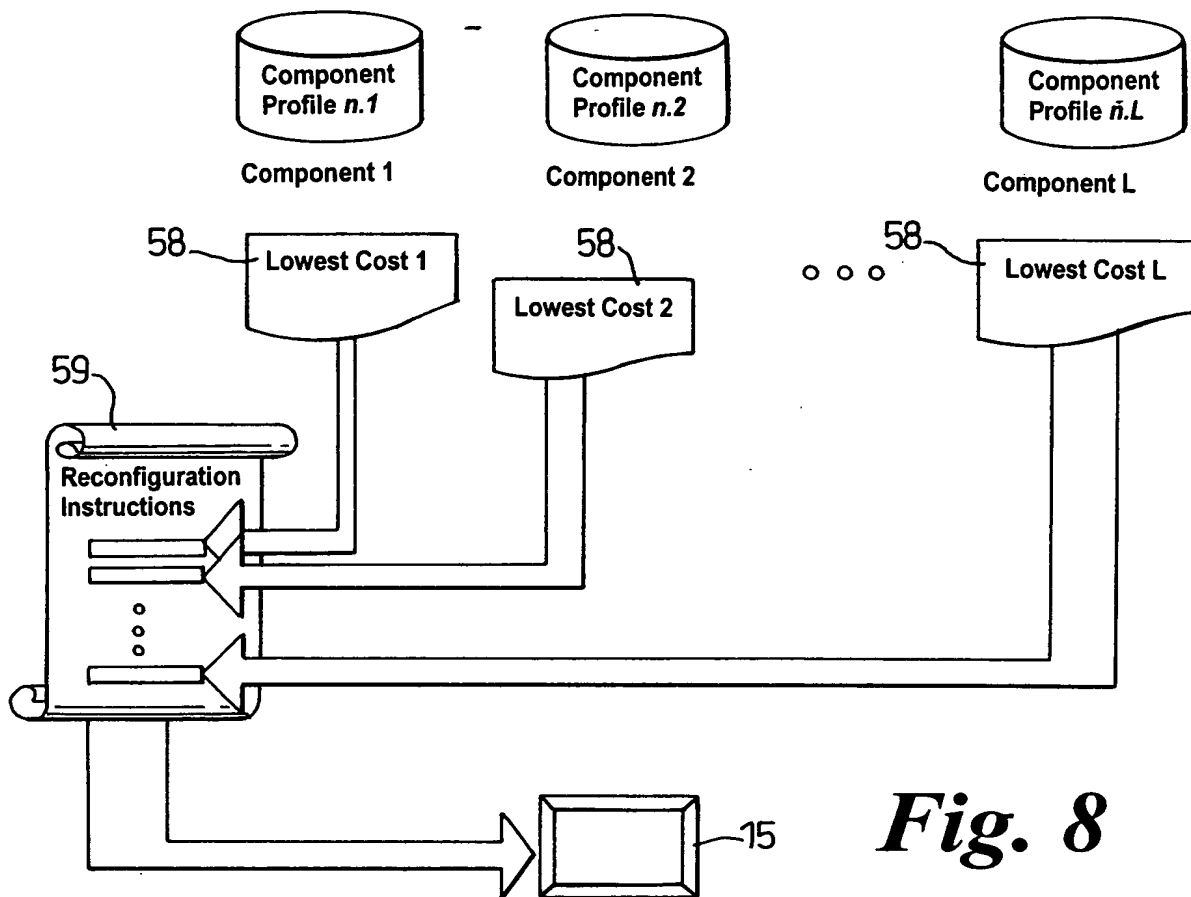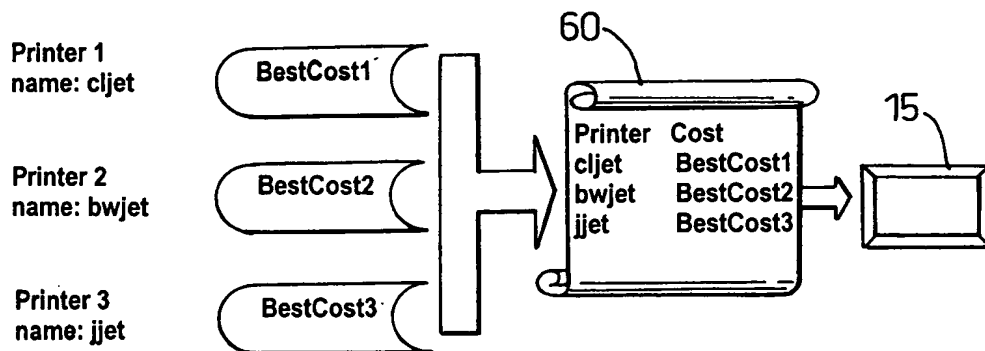
Fig. 4

Fig. 5

Printer Profile *n* — 32

Printer Profile Decomposition — 50

33 — **Non-configurable Properties Profile** *n,m*

⊕

35 — **Configurable Component Profile** *n,a*

Fig. 6

35 — **Configurable Component Profile** *n,m*

⊕

47 — {Set of Features}

Reconfiguration Analysis — 52

54 — **Reconfiguration Cost {Component** *n.m* **Feature Set}** — 56

Fig. 7

A set of possible component reconfigurations

Fig. 8

Fig. 9